L6 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2000 ACS

(FILE 'HOME' ENTERED AT 15:01:30 ON 27 OCT 2000)

FILE 'MEDLINE, CANCERLIT, EMBASE, BIOTECHDS, CAPLUS' ENTERED AT 15:01:41 ON 27 OCT 2000

L1 5952112 S POLYMER OR MICROSPHERE OR MICROCAPSULE OR MATRIX OR DNA OR NU
L2 67257 S CROWN ETHER OR POLYDENTATE OR CRYPTATE# OR POLYCROWN OR POLYE
L3 22704 S L2 AND L1
L4 18396 S CHELATOR OR POLYCHELATOR
L5 18 S L4 AND L3
L6 11 DUP REM L5 (7 DUPLICATES REMOVED)
L7 2929285 S DNA OR NUCLEIC OR POLYNUCLEOTIDE OR GENETIC OR VECTOR OR CARR
L8 545 S L7 AND L3
L9 114226 S GENE TRANSFE? OR GENE DELIVERY OR GENE THERAPY OR DNA TRANSFE
L10 13 S L9 AND L8
L11 8 DUP REM L10 (5 DUPLICATES REMOVED)
L12 103693 S COMPACT## OR CONDESNSE#
L13 0 S L12 AND L8
L14 27 S L12 AND L4
L15 14 DUP REM L14 (13 DUPLICATES REMOVED)
L16 1211 S L2 AND L7
L17 2 S L16 AND L12
L18 2 DUP REM L17 (0 DUPLICATES REMOVED)
L19 15 S L16 AND L9
L20 10 DUP REM L19 (5 DUPLICATES REMOVED)
L21 5 S L16 AND POLYLYSINE
L22 5 DUP REM L21 (0 DUPLICATES REMOVED)
L23 139896 S POLYLYSINE OR LYSINE
L24 110 S L23 AND L2
L25 1 S L24 AND L12
L26 50 S L24 AND L1
L27 45 DUP REM L26 (5 DUPLICATES REMOVED)
L28 545 S L16 AND L1
L29 18 S L28 AND THERAPY
L30 13 DUP REM L29 (5 DUPLICATES REMOVED)
L31 2736 S L4 AND L7
L32 2 S L31 AND L12
L33 35 S L31 AND L9

AN 1997:113426 CAPLUS
DN 126:122483
TI Chelating polymers as contrast agents for medical imaging
IN Hollister, Kenneth Robert; Keller, Kenneth Edmond; Wei, Dong; Peng, Xin; Ladd, David Lee; Snow, Robert Allen
PA Nycomed Imaging A/s, Norway; Cockbain, Julian
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT.1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

PI WO 9640274 A2 19961219 WO 1996-GB1308 19960603
WO 9640274 A3 19970213
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN
US 5801228 A 19980901 US 1995-478803 19950607
CA 2223456 AA 19961219 CA 1996-2223456 19960603
AU 9658415 A1 19961230 AU 1996-58415 19960603
EP 831930 A1 19980401 EP 1996-919953 19960603
R: DE, ES, FR, GB, IT, IE
CN 1192160 A 19980902 CN 1996-195898 19960603
NO 9705713 A 19980202 NO 1997-5713 19971205
PRAI US 1995-478803 19950607
WO 1996-GB1308 19960603

AB The invention provides polymeric polychelants contg. ***polymer*** repeat units of the formula [L-Ch-L-B](where Ch is a ***polydentate*** chelant moiety; L is an amide or ester linkage; B is a hydrophobic group providing a carbon chain of at least 4 carbon atoms between the L linkages it interconnects) or a salt or chelate thereof, with the proviso that where Ch is 2,5-biscarboxymethyl-2,5-diazahex-1,6-diyl, the polychelant is metalated with lanthanide or manganese ions or B provides a carbon chain of at least 10 carbon atoms between the L linkages it interconnects and their salts and chelates. The paramagnetic polychelates of the polychelants of the invention have remarkably high R1 relaxivities. An example complex is Gd(III)-1,6-hexanediamine-DTPA ***polymer*** complex.

L6 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2000 ACS
AN 2000:68361 CAPLUS
DN 132:127724
TI Chelating systems for use in the delivery of compounds to cells
IN Wolff, Jon A.
PA Mirus Corporation, USA
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE
PI WO 2000003738 A1 20000127 WO 1999-US16095 19990716
W: JP
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI US 1998-93230 19980717

AB ***Chelator*** contg. compds. are utilized in the delivery of mols., polymers, ***nucleic*** acids and genes to animal cells. At least one ***chelator*** such as ***crown*** ***ether*** is attached to a ***polymer*** and then assocd. with another ***polymer*** such as ***DNA*** . An ion is then added to the mixt. thereby forming condensed ***DNA*** . In condensed form and in complex with the ***chelator***

DNA can be delivered to a cell. Polyacrylamidobenzo-18-crown-6 was prepd. and cation binding as well as interaction with polylysine and

L11 ANSWER 8 OF 8 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1994-11653 BIOTECHDS
TI Triplex ***DNA*** formation bound to a chemical linker; ***DNA*** sequence; potential herpes simplex virus ***gene*** ***therapy***
PA Triplex-Pharm.; Baylor-Coll.Med.
PI WO 9415616 21 Jul 1994
AI WO 1993-US12618 28 Dec 1993
PRAI US 1992-998235 30 Dec 1992
DT Patent
LA English
OS WPI: 1994-248879 [30]
AB A new m-gap triplex forming oligonucleotide (TFO) (I), contains two or more TFO, each able to bind to contiguous target sites on a duplex ***DNA*** , and chemical linkers connecting this TFO and sufficiently long to allow binding. (I) has 2 or more TFO and suitable linkers include ***polyether*** , peptide, linear polymers and branched polymers containing amino acids or guanidinium side chains. Optionally, a ***DNA*** -damaging agent (II) is attached to the linker. Treatment of herpes simplex virus infection or generally any disease treatable by damaging native or foreign ***DNA*** is also claimed. By decomposing the target site into a series of isolated homopurine or homopyrimidine region, duplex binding sites without simple homopurine/homopyrimidine asymmetry can be accommodated. (I) when coupled to (II) are useful as site-specific ***DNA*** damaging agents for treating diseases in human and veterinary medicine, specifically herpes simplex virus-1 infection. Without (II), (I) may inhibit functioning of the target site in the duplex, displace the duplex from its target site, or inhibit transcription/translation of a gene under control of the bound site.

L27 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2000 ACS
AN 1995:305593 CAPLUS
DN 122:75613
TI Polychelants containing macrocyclic chelant moieties
IN Sieving, Paul F.; Watson, Alan D.; Quay, Steven C.; Rocklage, Scott M.
PA USA
SO U.S., 16 pp. Cont.-in-part of U.S. Ser. No.335,162, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5364613	A	19941115	US 1990-464865	19900116
CA 2051648	AA	19901008	CA 1990-2051648	19900405
WO 9012050	A1	19901018	WO 1990-EP565	19900405
W: AU, CA, FI, HU, JP, NO, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE				
AU 9054235	A1	19901105	AU 1990-54235	19900405
AU 656304	B2	19950202		

EP 474642 A1 19920318 EP 1990-906169 19900405
EP 474642 B1 19960626
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE
EP 481526 A1 19920422 EP 1991-118887 19900405
EP 481526 B1 19970312
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, LU, NL, SE
JP 04504436 T2 19920806 JP 1990-505940 19900405
HU 60277 A2 19920828 HU 1990-3650 19900405
AT 139790 E 19960715 AT 1990-906169 19900405
ES 2088428 T3 19960816 ES 1990-906169 19900405
AT 150047 E 19970315 AT 1991-118887 19900405
ES 2098299 T3 19970501 ES 1991-118887 19900405
NO 9103920 A 19911127 NO 1991-3920 19911004
NO 178866 B 19960311
NO 178866 C 19960619
US 5554748 A 19960910 US 1993-175989 19931230
PRAI US 1989-335162 19890407
US 1990-464865 19900116
WO 1990-EP565 19900405
OS MARPAT 122:75613
AB Polychelants and their metal chelates are provided which are useful in diagnostic imaging and in radiotherapy and which coprise a plurality of macrocyclic chelant moieties, e.g, DOTA residues, conjugated to a polyamine backbone mol., e.g, ***polylysine*** . To produce a site-specific polychelate, one or more of the macrocyclic chelant carrying backbone mols. may be conjugated to a site-directed macromol., e.g. a ***protein*** . Thus, DOTA was reacted with iso-Bu chloroformate, and the resulting DOTA carboxycarbonic anhydride was reacted with poly-L-***lysine*** to give ***polylysine*** -polyDOTA. The ***polylysine*** -polyDOTA was complexed with Gd and the Gd(***polylysine*** -polyDOTA) was coupled to human serum albumin. An MRI formulation and biodistribution data are included.

L34 ANSWER 15 OF 22 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1996-08791 BIOTECHDS
TI Immunochemically functional monoclonal antibody; or humanized antibody specific for a folic acid receptor antigen, for use in receptor-mediated ***gene*** ***transfer*** and cancer ***gene*** ***therapy*** by prodrug activation
AU Kull Jr F C; Fling M E; Stimmel J B
PA Wellcome
LO Greenford, UK.
PI WO 9614339 17 May 1996
AI WO 1995-GB2585 3 Nov 1995
PRAI GB 1994-22383 5 Nov 1994
DT Patent
LA English
OS WPI: 1996-251716 [25]
AB A new immunochemically functional monoclonal antibody (MAb) has a cysteine residue exposed on the surface, so that the residue is capable of being conjugated to a substance. The Cys residue may be in the variable region (but not in the complementarity determining region) or in the constant region (e.g. at position 442 in the heavy chain CH3 domain). The MAb (which may be G1 or G4 isotype) preferably binds to a mol.wt. 40,000 antigen or a folic acid receptor antigen, and may be a humanized antibody. The conjugate may be produced using a linker and a

chelator , and may be a radioimmunotherapy agent with 90-yttrium or 177-lutetium, or may be a ***gene*** ***therapy*** conjugate with ***DNA*** encoding an enzyme for prodrug activation in a cancer cell, under the control of a tissue-specific or cancer-specific transcriptional regulator, in a virus ***vector*** of liposome. The latter may be used for therapy of small cell and non-small cell lung carcinoma, prostate carcinoma and associated metastasis, or ovary type strains. (132pp)

L34 ANSWER 12 OF 22 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1998-02739 BIOTECHDS
TI Delivery of physiologically active protein in vivo;
enzyme, hormone, growth factor, regulatory sequence or immunomodulator ***gene*** ***transfer*** to heart muscle and tissue-specific gene expression using a plasmid ***vector*** , for ***gene*** ***therapy***
AU Wolff J A; Duke D J; Felgner P L
PA Vical; Wisconsin-Alumni-Res.Found.
LO San Diego, CA, USA; Madison, WI, USA.
PI US 5693622 2 Dec 1997
AI US 1995-480039 7 Jun 1995
PRAI US 1995-480039 7 Jun 1995
DT Patent
LA English
OS WPI: 1998-031790 [03]
AB A new method for delivering a protein, polypeptide or peptide agent to a mammal involves injecting a non-infectious non-integrating gene encoding the agent operably linked to a muscle-specific or heart-specific promoter, into cardiac muscle. The ***DNA*** is preferably free from transfection-facilitating protein, virus particle, liposome, charged lipid or calcium phosphate components. The protein may be immunologically native or foreign to the host. An immunosuppressive agent may be administered i.v. or to the heart prior to or simultaneously with ***DNA*** injection, to limit the immune response. Expression may be transient. The protein is preferably an enzyme, hormone, growth factor, regulatory sequence or immunomodulator. The ***DNA*** may be injected myocardially or into the heart ventricular wall, optionally in combination with a ***chelator*** , e.g. EDTA. A new method for delivering firefly luciferase (EC-1.13.12.7) to a rat heart muscle cell interior involves injecting a plasmid ***vector*** containing the luciferase gene and an RSV promoter. (38pp)

L34 ANSWER 11 OF 22 BIOTECHDS COPYRIGHT 2000 DERWENT INFORMATION LTD
AN 1998-02747 BIOTECHDS
TI Stabilizing high purity ***DNA*** by transfer to metal-free solution and optionally lyophilizing;
for use as a ***nucleic*** acid vaccine and in ***gene*** ***therapy*** against e.g. influenza
AU Volkin D B; Evans R K; Bruner M
PA Merck-USA
LO Rahway, NJ, USA.
PI WO 9740839 6 Nov 1997
AI WO 1997-US6655 22 Apr 1997
PRAI US 1997-844525 18 Apr 1997; US 1996-17049 26 Apr 1996
DT Patent

LA English
OS WPI: 1998-032162 [03]
AB Highly purified ***DNA*** (I) is stabilized (optionally after removal of metal ions) by adding a solution free of metal ions (optionally after transfer to the metal free solution), combining with an amorphous sugar and lyophilizing. Also new are: stable ***DNA*** formulations containing (I), a non-reducing free radical scavenger (II), a salt and buffer, and stable ***DNA*** formulations containing metal-free ***DNA*** and (II). The method may be used to stabilize ***DNA*** for use in ***nucleic*** acid vaccines or ***gene*** ***therapy*** , particularly influenza virus vaccines that encode proteins able to generate antibodies and cytotoxic-T-lymphocytes. (I) is from 1 or more of influenza virus, hepatitis A, B or C virus, HIV virus, human papilloma virus, varicella-zoster virus, or Mycobacterium tuberculosis. (II) is preferably ethanol, suitable salts include Na and K, and buffers include Tris-hydrochloride. The solution may include a metal ion ***chelator*** , e.g. EDTA, nitrilotriacetic acid, etc. The vaccines contain separate ***DNA*** plasmids encoding hemagglutinin from 3 prevalent clinical strains and ***DNA*** constructs encoding the internal, consensus nucleoproteins and matrix proteins from A and B

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Search Results -

Terms	Documents
polychelator	10

Database: US Patents Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Refine Search: polychelator Clear

Search History

Today's Date: 10/27/2000

DB Name	Query	Hit Count	Set Name
USPT,JPAB,EPAB	polychelator	10	L14
USPT,JPAB,EPAB	l10 and l8	16	L13
USPT,JPAB,EPAB	l11 and l8	3	L12
USPT,JPAB,EPAB	l10 same l8	3	L11
USPT,JPAB,EPAB	delivery or transfe$ or therapy	1269893	L10
USPT,JPAB,EPAB	l8 and l2	9	L9
USPT,JPAB,EPAB	l7 with l5	51	L8
USPT,JPAB,EPAB	carrier or vector or microcapsule or microsphere or matrix	905020	L7
USPT,JPAB,EPAB	l5 with l2	15	L6
USPT,JPAB,EPAB	l4 with l1	871	L5
USPT,JPAB,EPAB	crown or polycrown or polydentate or cryptate or crown ether	48178	L4
USPT,JPAB,EPAB	crown or polycrown or polydentate or cryptate or crown ether	48178	L3
USPT,JPAB,EPAB	dna or nucleic or polynucleotide or protein or polypeptide	177231	L2
USPT,JPAB,EPAB	polymer or microcapsule or microsphere or lipid or liposome	577170	L1

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L13: Entry 14 of 16 File: USPT Oct 2, 1984

US-PAT-NO: 4474963
DOCUMENT-IDENTIFIER: US 4474963 A

TITLE: Crown ether compositions with sidearms affording enhanced cation binding

DATE-ISSUED: October 2, 1984

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gokel; George W.	Greenbelt	MD	N/A	N/A

US-CL-CURRENT: 546/178; 546/281.7, 549/352, 549/353

CLAIMS:

I claim:
1. (4-allyl-2-methoxyphenoxy)methyl-15-crown-5.
2. (4-propyl-2-methoxyphenoxy)methyl-15-crown-5.
3. [4-(2-hydroxypropyl)-2-methoxyphenoxy]methyl-15-crown-5.
4. (8-quinolinyloxy)methyl-15-crown-5.
5. (2-methoxyphenoxy)methyl-15-crown-5.
6. 2-[2-(2-benzyloxyethoxy)ethoxy]ethoxymethyl-15-crown-5.

L9: Entry 8 of 9 File: USPT Nov 19, 1985

DOCUMENT-IDENTIFIER: US 4554362 A
TITLE: Bis-crown-ether derivatives and their use

DEPR:
The ion-selective membranes of the present invention may be used in the form of solid membrane or liquid membrane. The solid membrane may be formed by dispersing the above-mentioned bis-crown compound homogeneously in a water-insoluble solid organic polymer as carrier. The polymer is desired to have a property of forming a matrix for supporting the bis-crown compound, a neutral carrier, in the form of a membrane and preventing elution of the neutral carrier into an aqueous solution to be measured or the like. At the same time, the polymer is desired to have a property of enabling proper dispersion of potassium or the like ion contained in the aqueous solution to be measured into the matrix. As such polymer are used polyvinyl chloride, silicone rubber, polymethyl methacrylate and the like, usually.

DEPR:
On the other hand, the membrane of valinomycin is not affected by organic substances in blood such as protein enzyme, sugar and the like. Similarly, no substantial effect by the organic substances in blood was observed on the ion-selective membrane in accordance with the invention.

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L13: Entry 6 of 16 File: USPT Apr 22, 1997

US-PAT-NO: 5622945
DOCUMENT-IDENTIFIER: US 5622945 A
TITLE: Rubyrin macrocycles
DATE-ISSUED: April 22, 1997

US-CL-CURRENT: 514/185; 514/183, 536/18.7, 540/145, 540/465, 540/472, 540/474

APPL-NO: 8/ 368336
DATE FILED: January 4, 1995

PARENT-CASE:
This application is a divisional of U.S. Ser. No. 08/015,208, filed Feb. 9, 1993, now U.S. Pat. No. 5,410,045 which is a continuation-in-part of U.S. Ser. No. 07/926,357, filed Aug. 4, 1992, now abandoned. The government owns rights in the present invention pursuant to NIH grant AI 28845.